

WHAT IS CLAIMED IS:

1. A photoresist stripping agent comprising a reaction product that is produced by the reaction of formaldehyde and an alkanolamine in a molar ratio of 0.8 or less.

5 2. The photoresist stripping agent according to Claim 1, wherein the alkanolamine is at least one compound selected from the group consisting of ethanolamine, N-methylethanolamine, N-ethylethanolamine, N-propylethanolamine, N-butylethanolamine, diethanolamine, isopropanolamine, N-methylisopropanolamine, N-ethylisopropanolamine, N-
10 propylisopropanolamine, 2-aminopropane-1-ol, N-methyl-2-amino-propane-1-ol, and N-ethyl-2-amino-propane-1-ol.

3. The photoresist stripping agent according to Claim 1, further comprising an alkali compound.

15 4. The photoresist stripping agent according to Claim 3, wherein the alkali compound is at least one compound selected from the group consisting of alkylamines, alkanolamines, polyamines, cyclic amines, quaternary ammonium salts and hydroxylamine compounds.

5. The photoresist stripping agent according to Claim 1, further comprising an organic solvent.

20 6. The photoresist stripping agent according to Claim 5, wherein the organic solvent is at least one solvent selected from the group consisting of ether solvents, amide solvents, alcohol solvents, sulfoxide solvents, sulfone solvents, imidazolidinone solvents, and lactone solvents.

25 7. The photoresist stripping agent according to Claim 1, further comprising an anticorrosion agent.

8. The photoresist stripping agent according to Claim 7, wherein the anticorrosion agent is at least one compound selected from the group consisting of aromatic hydroxy compounds, sugar alcohols, triazole compounds and chelating compounds.

9. The photoresist stripping agent according to Claim 1, further comprising water.

10. The photoresist stripping agent according to Claim 1, comprising 0.001 to 100% by weight of the reaction product of formaldehyde and the alkanolamine, and at least one optional component selected from the group consisting of 0 to 99.999% by weight of the alkali compound, 0 to 99% by weight of the organic solvent, 0.1 to 30 % by weight of the anticorrosion agent, and 1 to 50% by weight of water, each percentage being selected from respective range so that a total thereof adds up to 100% by weight.

11. The photoresist stripping agent according to Claim 1, wherein the reaction product of formaldehyde and the alkanolamine is a formaldehyde-monoethanolamine condensate or a formaldehyde-isopropanolamine condensate.

12. The photoresist stripping agent according to Claim 1, wherein the reaction product of formaldehyde and the alkanolamine is produced by a method comprising:

a step of slowly adding formaldehyde to a predetermined amount of the alkanolamine over 30 to 1200 min under stirring while maintaining a temperature of a reaction solution at 70°C or lower; and

an optional step of further stirring the reaction solution for 30 to 1200 min while maintaining a temperature of the reaction solution at 70°C or lower, each of the steps being conducted in an inert gas atmosphere.

13. The photoresist stripping agent according to Claim 1, wherein the reaction product of formaldehyde and the alkanolamine shows peaks at least at 45 to 50, 61 to 62 and 64 to 70 ppm when measured by ¹³C-NMR (DMSO-d6).